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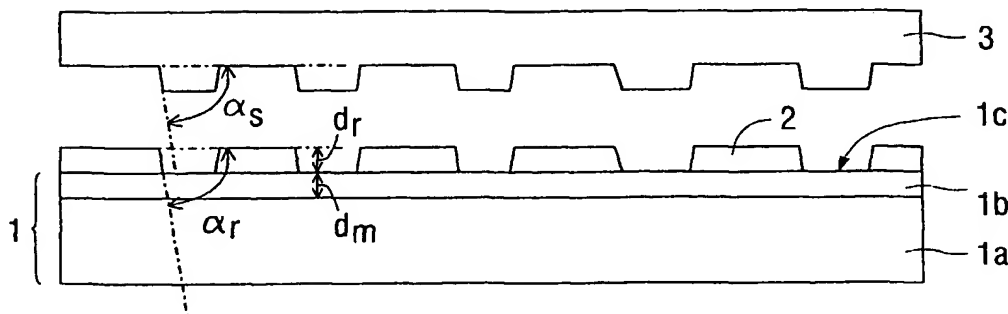
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[Continued on next page]

(54) Title: **PHOTOLITHOGRAPHIC PROCESS, STAMPER, USE OF SAID STAMPER AND OPTICAL DATA STORAGE MEDIUM**



(57) Abstract: A photolithographic process is described. It comprises the steps of: applying a photoresist layer (2) on a substrate (1), locally exposing the photoresist layer (2) to a radiation source with a suitable wavelength, providing a suitable liquid developer composition on the substrate (1), dissolving an exposed or unexposed region of the photoresist layer (2) with the developer composition, rinsing and drying the photoresist layer (2) thereby interrupting said dissolving step. The substrate (1) has a metallic surface (1c) in contact with the photoresist layer (2) and the photoresist layer (2) has a thickness  $d_r < 100\text{nm}$ . A relatively high photoresist wall steepness is achieved of 70 degrees or more. The process may be used for the production of high density optical data storage media by using a stamper (3) produced with said process.



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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, PAJ, IBM-TDB, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>NING GU ET AL: "Application of poly(methyl methacrylate) ultrathin resist supported by a flowing subphase method in electron-beam fabrication of a 4 in. high-resolution mask"</p> <p>JOURNAL OF VACUUM SCIENCE &amp; TECHNOLOGY B (MICROELECTRONICS AND NANOMETER STRUCTURES) AIP FOR AMERICAN VACUUM SOC USA, vol. 15, no. 1, 1997, pages 178-179, XP000729009 ISSN: 0734-211X the whole document</p> <p>----- -/--</p>	1-3

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KUAN S W J ET AL: "Ultrathin poly(methylmethacrylate) resist films for microlithography" JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B (MICROELECTRONICS PROCESSING AND PHENOMENA) USA, vol. 7, no. 6, 1989, pages 1745-1750, XP000249740 ISSN: 0734-211X the whole document	1-3
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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